Software Project Categorization Table (From LeR M2.6.4 LeRC's Software Development Manual, Draft C, 7/20/98)

Project Name:			
Lead Engineer:	Date:	Control Level :	

Factor	1	2	3	4	5
Resourcing					
Software cost over life of	\$0 - \$250K	\$250K - 500K	\$500K - \$1M	\$1M - \$10M	\$10M and up
project (including all civil					_
servants and contractors)					
Project Team Membership	Up to 2, all	Up to 5, all	Up to 10 all	Up to 20 all	More than 20
	NASA or SSC	NASA or SSC;	NASA or SSC;	NASA or SSC;	all NASA or
		or up to 5 with	or up to 5 with	or up to 10 with	SSC; more than
		some external	some external	some external	10 with some
		contract support	contract	contract support	external
			support		contract support
Organizational Complexit		1 a 1 a	1 2	1 2	
Project development	Own Group	Several Groups,	More than 2	More than 3	Numerous sites
location		most at Lewis	other sites	other sites	
Developers Software	All team	Most team	Half the team	Few team	Experienced
experience level	qualified and	members	qualified and	members	staff no
	experienced	qualified and	experienced	experienced	available
T1		experienced			
Technical Complexity	No testina	1	Standard		Major tostina
Test Risk	No testing required		testing		Major testing effort required
Test Risk Test	required		required		(e.g. IV&V)
Degree of Innovation	Well proven,		Proven, but		Pioneering
Degree of filliovation	known to Lewis		new to Lewis		Tioncering
Software development	All software	Majority of the	Software	Majority of	All software
tool availability	development	software	development	software	development
y	tools already	development	tools must be	development	tools must be
	purchased/in-	tools are	identified and	tools must be	developed
	house/familiar	purchased /in-	purchased and	obtained,	1
	with	house/familiar	learned	remainder	
		with		developed	
Interdependencies of	Simple	Some	Integrated	Highly	Fully integrated
deliverables	standalone	Integration		integrated	
Business Implications					
Impact of failure	Difficult to	Maximum loss	Maximum loss	Loss exceeding	Loss of life,
	detect, minor	of \$500K, loss	of \$1M,	\$1M, severe	very
	loss in customer	in customer	damage to	damage to	significant
	confidence	confidence	LeRC/NASA	LeRC/NASA	impact to
			reputation	reputation	NASA
Schedule Pressure	No time	Little effort to	Nominal effort	Aggressive	Time critical
	pressure	meet milestones	to meet	effort to meet	
			milestones	milestones	
Customers					
Internal	Self	Other in own	Another	Several	Center wide use
		Directorate	Directorate	Directorates	
External	None	One customer	One customer	Several	Entire industry
		group, low	group,	customer	or multiple
		number of users	numerous	groups	industries
			users		

Low control software
Medium control software
High control software